

03040201-150

(Catfish Creek)

General Description

Watershed 03040201-150 is located in Marion and Dillon Counties and consists primarily of **Catfish Creek** and its tributaries. The watershed occupies 111,369 acres of the Upper and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Norfolk-Coxville-Rains-Fuquay series. The erodibility of the soil (K) averages 0.20; the slope of the terrain averages 2%, with a range of 0-6%. Land use/land cover in the watershed includes: 27.9% scrub/shrub land, 27.7% forested land, 21.9% agricultural land, 20.5% forested wetland (swamp), 1.9% urban land, and 0.1% water.

Catfish Canal receives drainage from Stackhouse Creek (Boggy Branch) and flows through Catfish Swamp near the City of Marion. Collins Creek accepts drainage from Smith Swamp (Grassy Bay, Rabbit Bay, Tenmile Bay, Little Horsepen Bay, Big Horsepen Bay, Middle Bay, Wolfpit Bay) and joins Catfish Canal to form the headwaters of Catfish Creek. Catfish Creek then accepts drainage from Flat Swamp, Pitch Pot Swamp (Millrace Stream, Keedley Swamp, Wiggins Swamp), Mink Creek, and Beverly Swamp. The Catfish Creek Watershed drains into the Pee Dee River. There are a few ponds (totaling 67.1 acres) in this watershed and a total of 97.2 stream miles. Catfish Creek and Smith Swamp are classified FW* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5) and the remaining streams in the watershed are classified FW.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-320	S	FW*	SMITH SWAMP AT S-34-19 1 MILES E OF MARION
PD-187	P	FW*	SMITH SWAMP AT US 501 1.9 MILES SSE OF MARION
PD-097	S	FW*	CATFISH CREEK AT S-34-34 6 MILES SW OF MARION

Smith Swamp - There are two monitoring sites along Smith Swamp. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life uses are fully supported at the upstream site (**PD-320**). A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. At the downstream site (**PD-187**), aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life acute standards. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. Recreational uses are partially supported at both sites due to fecal coliform bacteria excursions; however, significant decreasing trends in fecal coliform bacteria concentration suggest improving conditions for this parameter.

Catfish Creek (PD-097) - Aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. This stream frequently does not flow at the monitoring location, and although dissolved oxygen excursions occurred, they were typical of values seen in stagnant streams, especially in channelized situations and were considered natural, not standards violations. P,P' DDT, P,P' DDD, and P,P'DDE are metabolites of DDT. P,P' DDT was detected in the 1994 sediment sample, P,P' DDD was detected in the 1994 and 1998 samples, and P,P'DDE was detected in the 1994, 1995, 1997, and 1998 samples. Also in sediments, the pesticide chlordane was detected in the 1997 sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentration.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT	NPDES# TYPE LIMITATION
CATFISH CANAL TRICO/FRED HYATT WTP PIPE #: 001 FLOW: MR	SCG645023 MINOR DOMESTIC EFFLUENT
CATFISH CANAL AL WILLIAMS INDUSTRY PIPE #: 001 FLOW: 4.00 WQL FOR DO,TRC,NH3N,BOD5	SCG130002 MINOR INDUSTRIAL WATER QUALITY

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME FACILITY TYPE	PERMIT # STATUS
CITY OF MARION DUMP -----	----- CLOSED
CITY OF MARION C&D LANDFILL CONSTRUCTION	341003-1201 -----

Mining Activities

MINING COMPANY MINE NAME	PERMIT # MINERAL
MARION COUNTY BOBBY MACE BORROW PIT	0298-67 SAND/CLAY
CITY OF MARION COLEMAN MINE	1131-67 SAND/CLAY
BAKERS BROTHERS OF GRESHAM, INC.	1134-67

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the City of Marion and is adjacent to the Town of Latta. Commercial development is limited to the City of Marion and portions of U.S. Hwy. 76, particularly east of Marion at the U.S. Hwy. 501 Bypass. Industrial development occurs along U.S. Hwy. 76 and U.S. Hwy. 501 Bypass near Marion. This watershed also contains the Marion Industrial Park and the Latta Industrial Park. U.S. Hwy. 76 and U.S. Hwy. 501 Bypass are four-lane major highways that serve as major access corridors to the Grand Strand and will increase in traffic and development. Water service is provided from the City of Marion and the Marion County Rural Water Company and covers most of the watershed. Sewer service is available to the areas in and around the City of Marion and the Town of Latta.